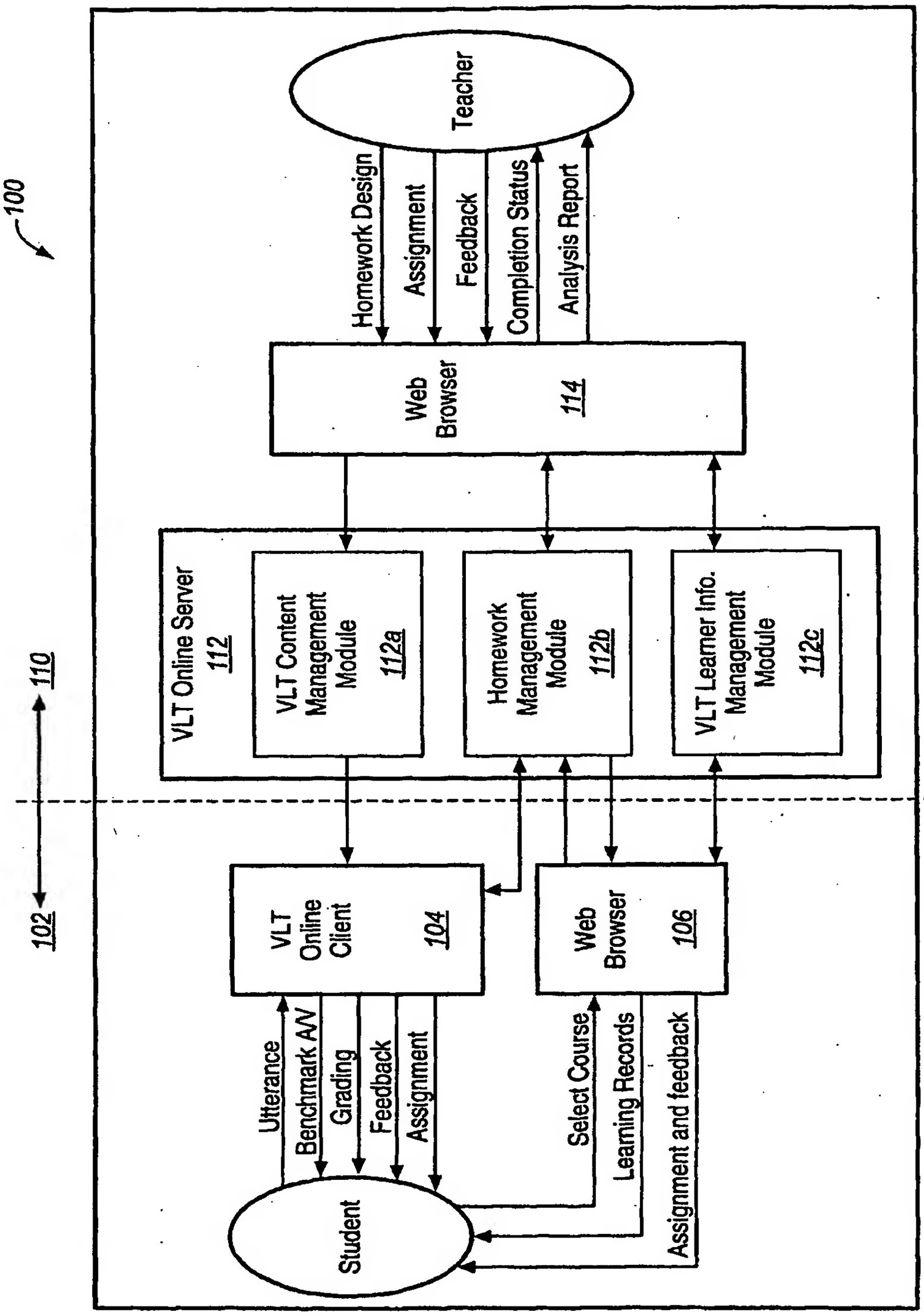

100
Teacher
Homework Design
Assignment
Feedback
Completion Status
Analysis Report
Web Browser 114
VLT Online Server 112
VLT Content Management Module 112a
Homework Management Module 112b
VLT Learner Info. Management Module 112c
110
102
VLT Online Client 104
Web Browser 106
Utterance
Benchmark A/V
Grading
Feedback
Assignment
Select Course
Learning Records
Assignment and feedback
Student

FIG. 1

FIG. 2

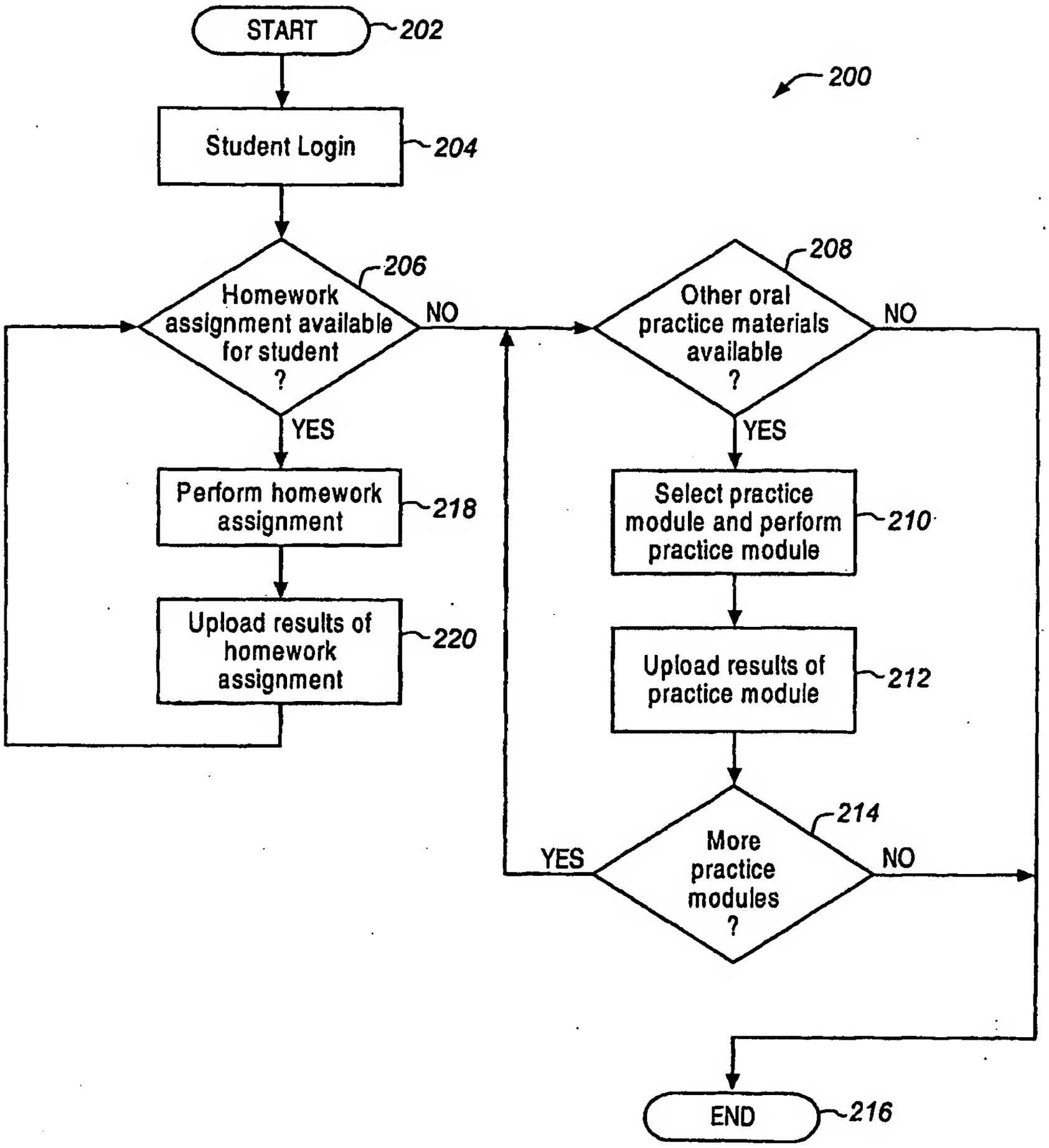

200
START
202
Student Login
204
Homework assignment available for student ?
206
NO
YES
Perform homework assignment
218
Upload results of homework assignment
220
Other oral practice materials available ?
208
NO
YES
Select practice module and perform practice module
210
Upload results of practice module
212
More practice modules ?
214
YES
NO
END
216

FIG. 3

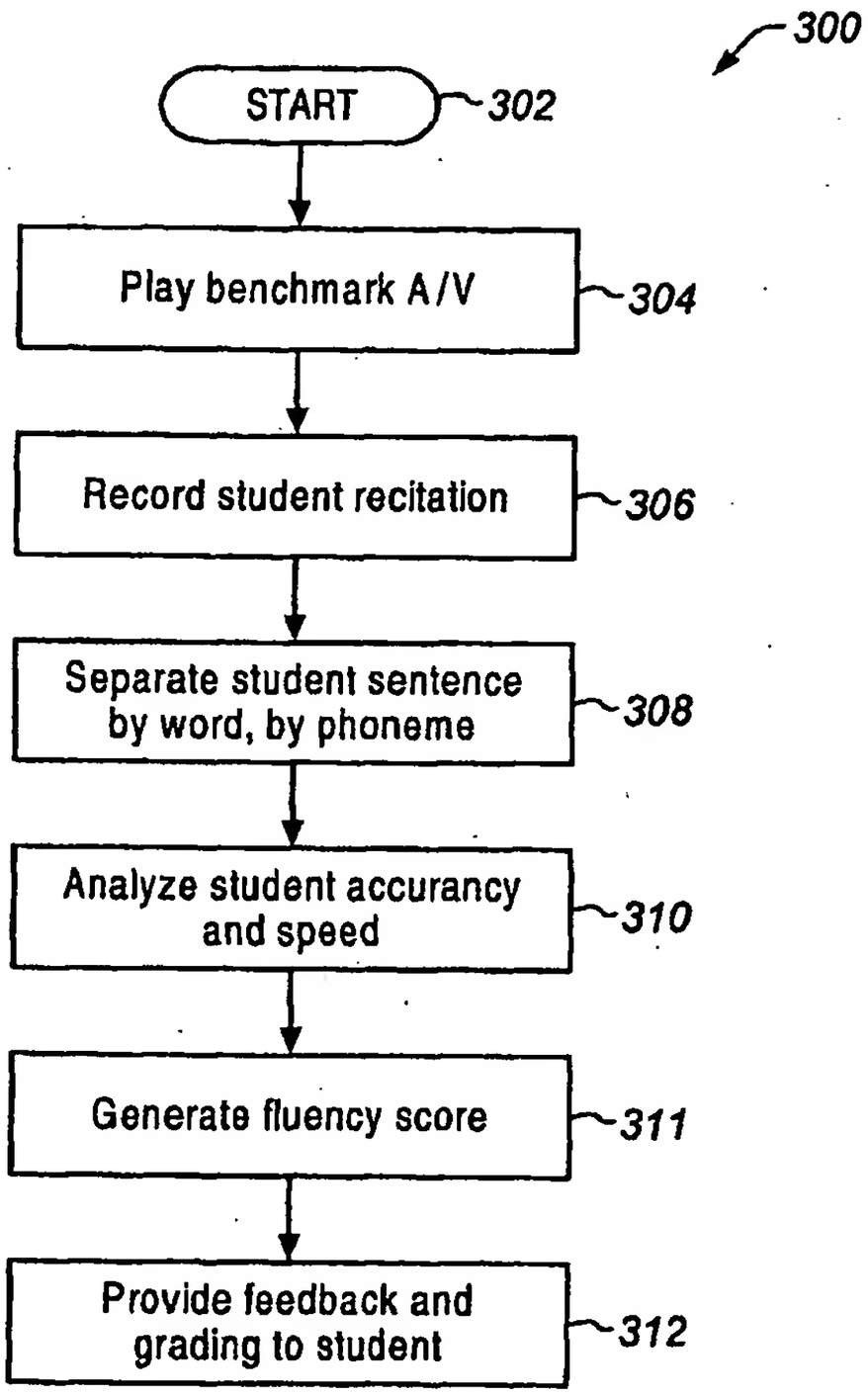

300
START
302
Play benchmark A/V
304
Record student recitation
306
Separate student sentence by word, by phoneme
308
Analyze student accurancy and speed
310
Generate fluency score
311
Provide feedback and grading to student
312

FIG. 4

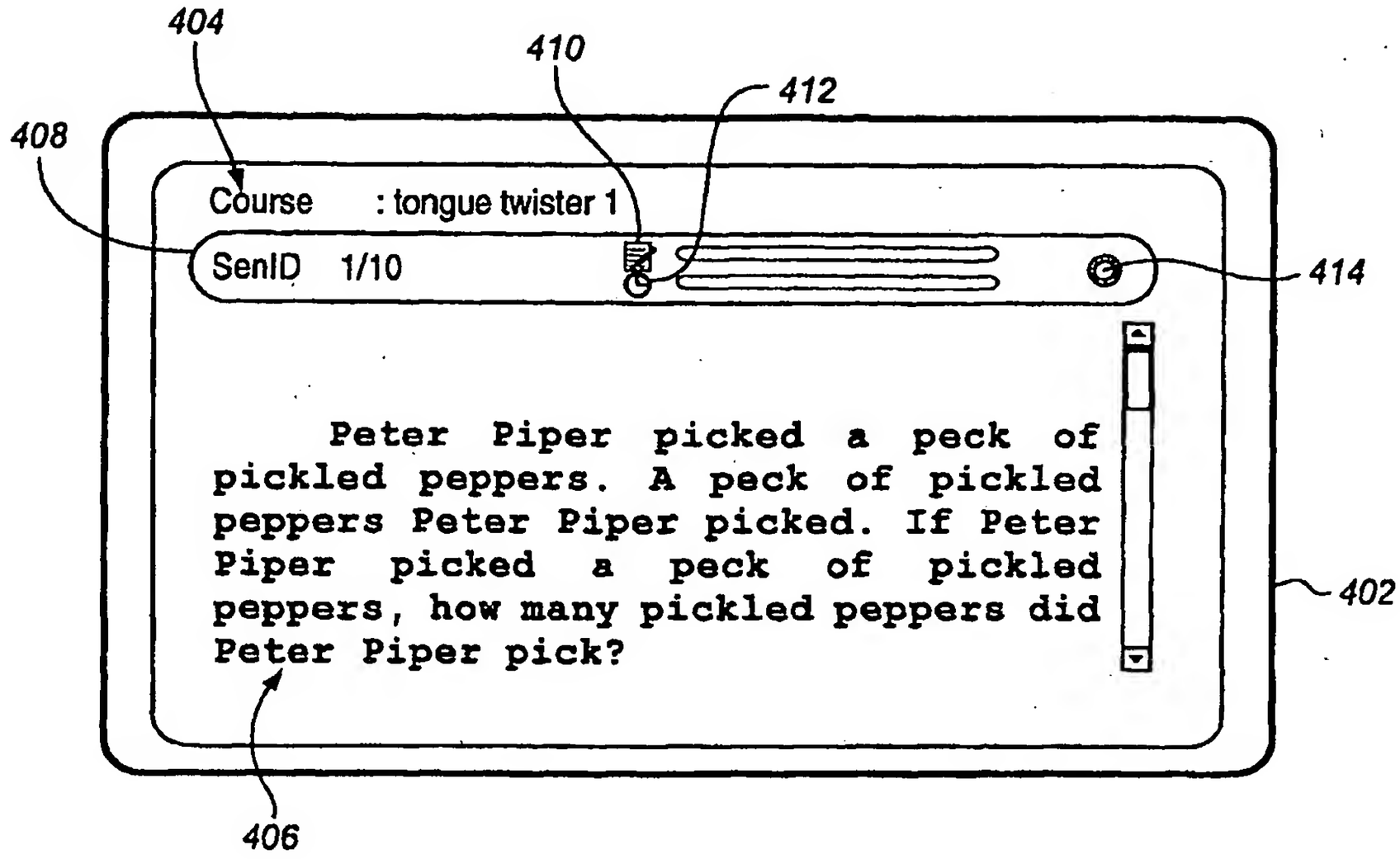

404
410
412
408
Course : tongue twister 1
SenID 1/10
414
Peter Piper picked a peck of pickled peppers. A peck of pickled peppers Peter Piper picked. If Peter Piper picked a peck of pickled peppers, how many pickled peppers did Peter Piper pick?
402
406

FIG. 5

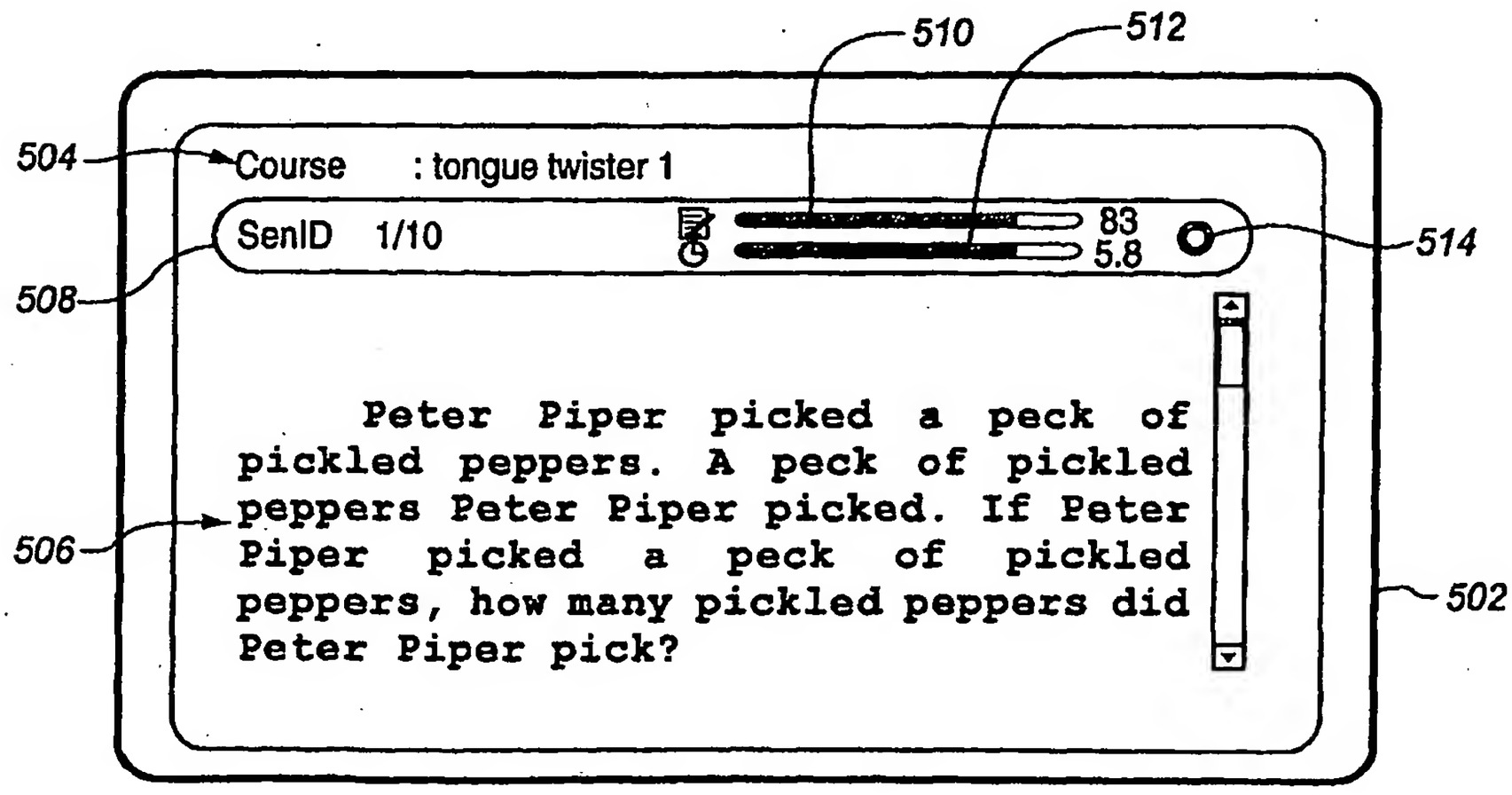

510
512
504
Course : tongue twister 1
SenID 1/10
83
5.8
514
508
Peter Piper picked a peck of pickled peppers. A peck of pickled peppers Peter Piper picked. If Peter Piper picked a peck of pickled peppers, how many pickled peppers did Peter Piper pick?
506
502

FIG. 6

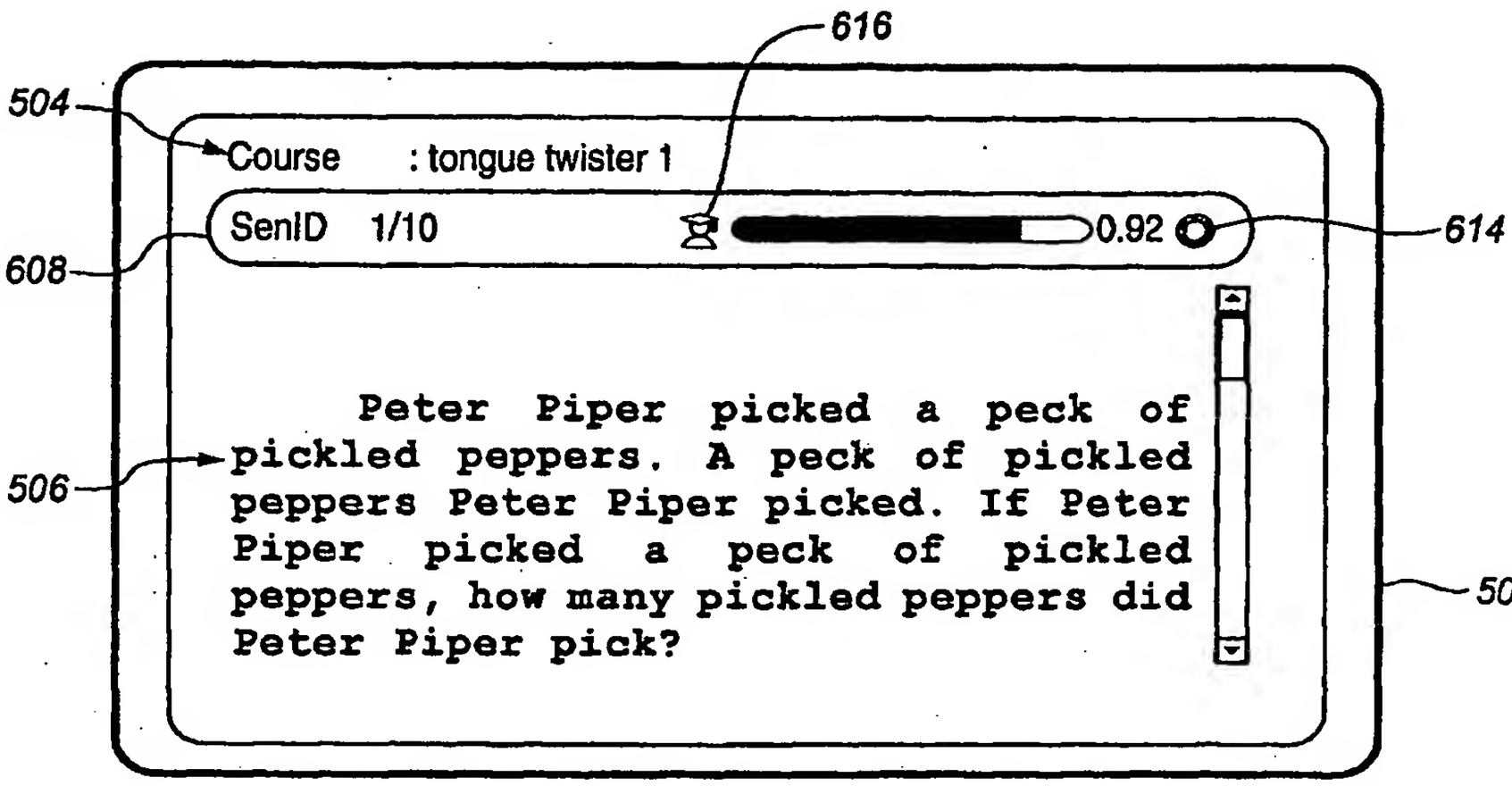

616
504
Course : tongue twister 1
SenID 1/10
0.92
614
608
Peter Piper picked a peck of pickled peppers. A peck of pickled peppers Peter Piper picked. If Peter Piper picked a peck of pickled peppers, how many pickled peppers did Peter Piper pick?
506
502

FIG. 7

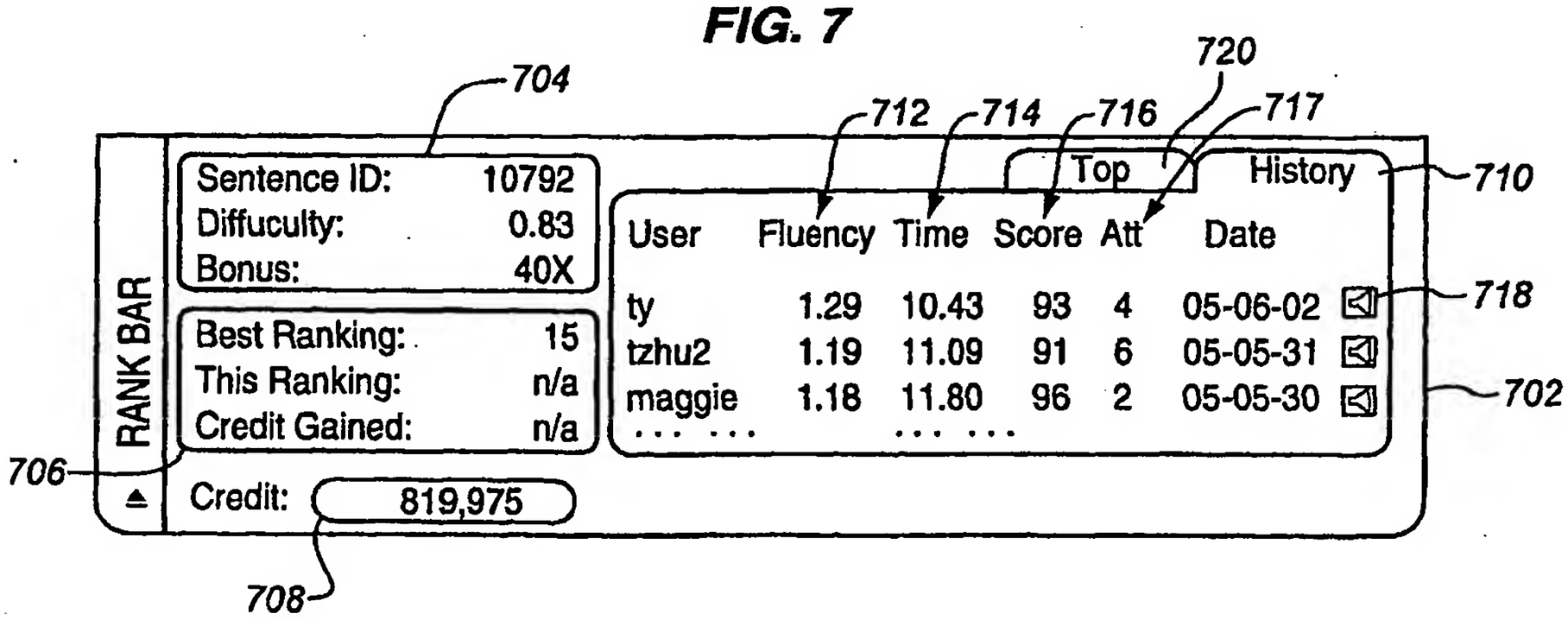
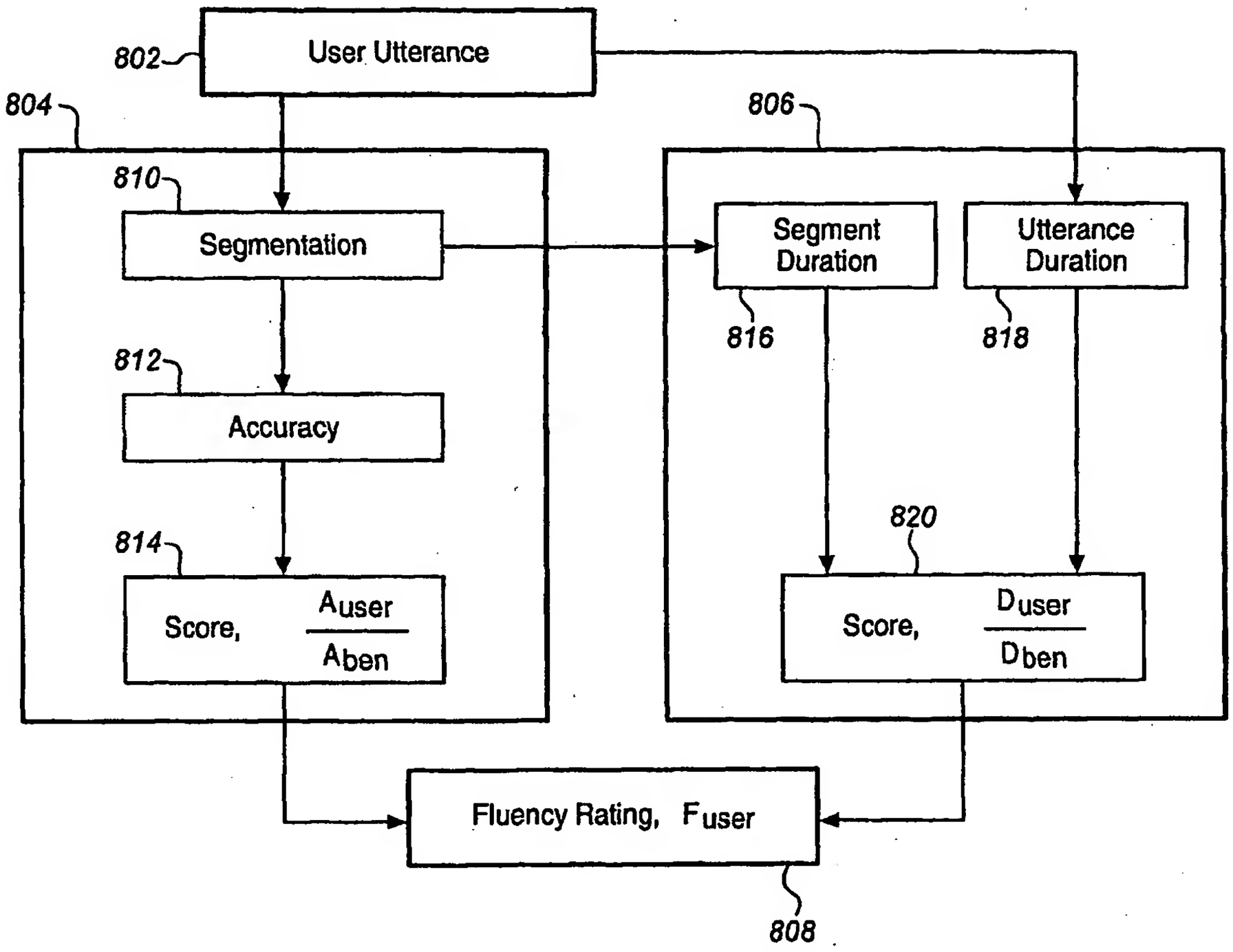

704
712
714
716
720
717
Top
History
710
Sentence ID: 10792
Diffuculty: 0.83
Bonus: 40X
User Fluency Time Score Att Date
ty 1.29 10.43 93 4 05-06-02
tzhu2 1.19 11.09 91 6 05-05-31
maggie 1.18 11.80 96 2 05-05-30
718
Best Ranking: 15
This Ranking: n/a
Credit Gained: n/a
706
RANK BAR
Credit: 819,975
708
702

FIG. 8


802
User Utterance
804
806
810
Segmentation
812
Accuracy
814
Score, Auser / Aben
Segment Duration
Utterance Duration
816
818
820
Score, Duser / Dben
Fluency Rating, Fuser
808

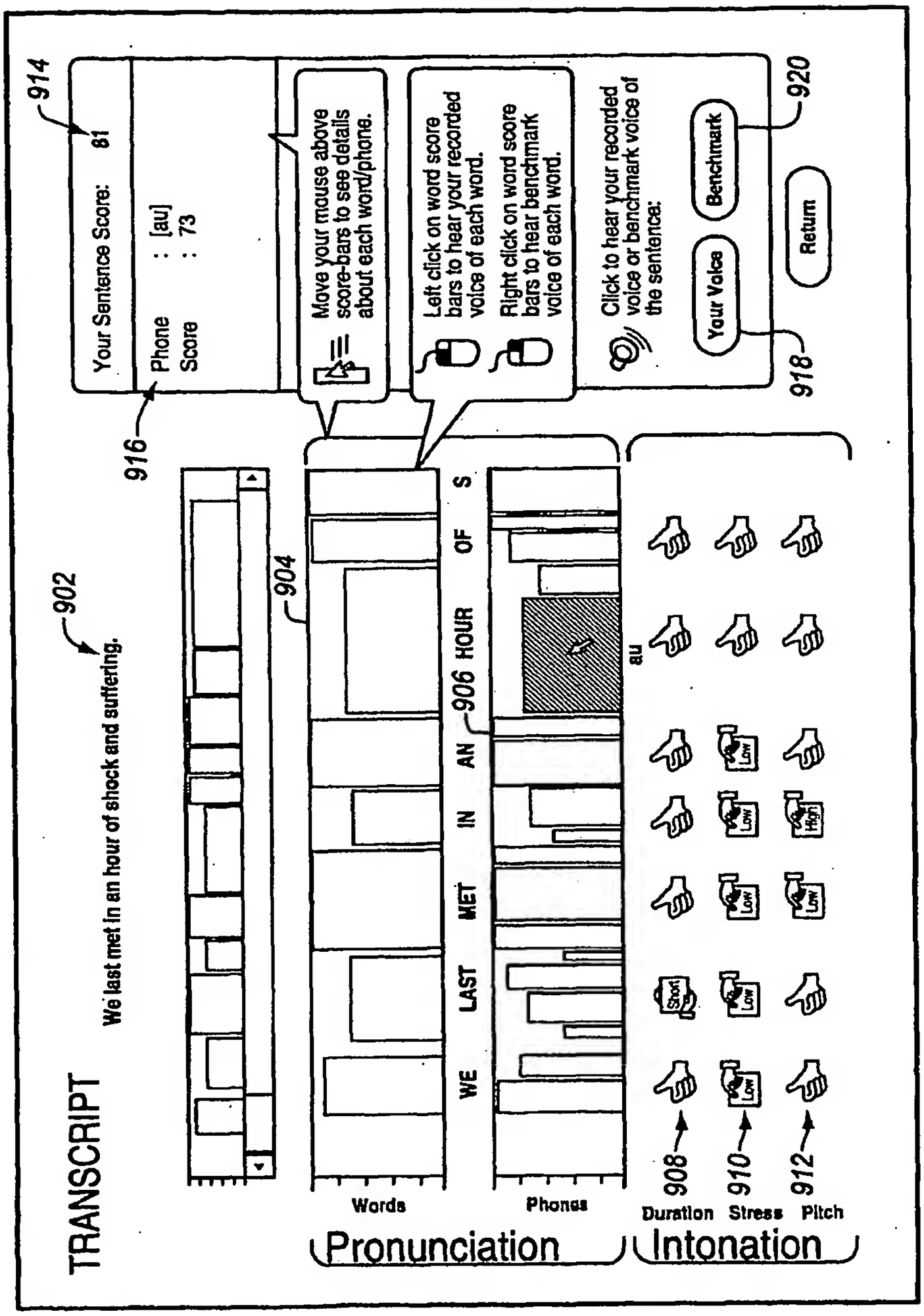
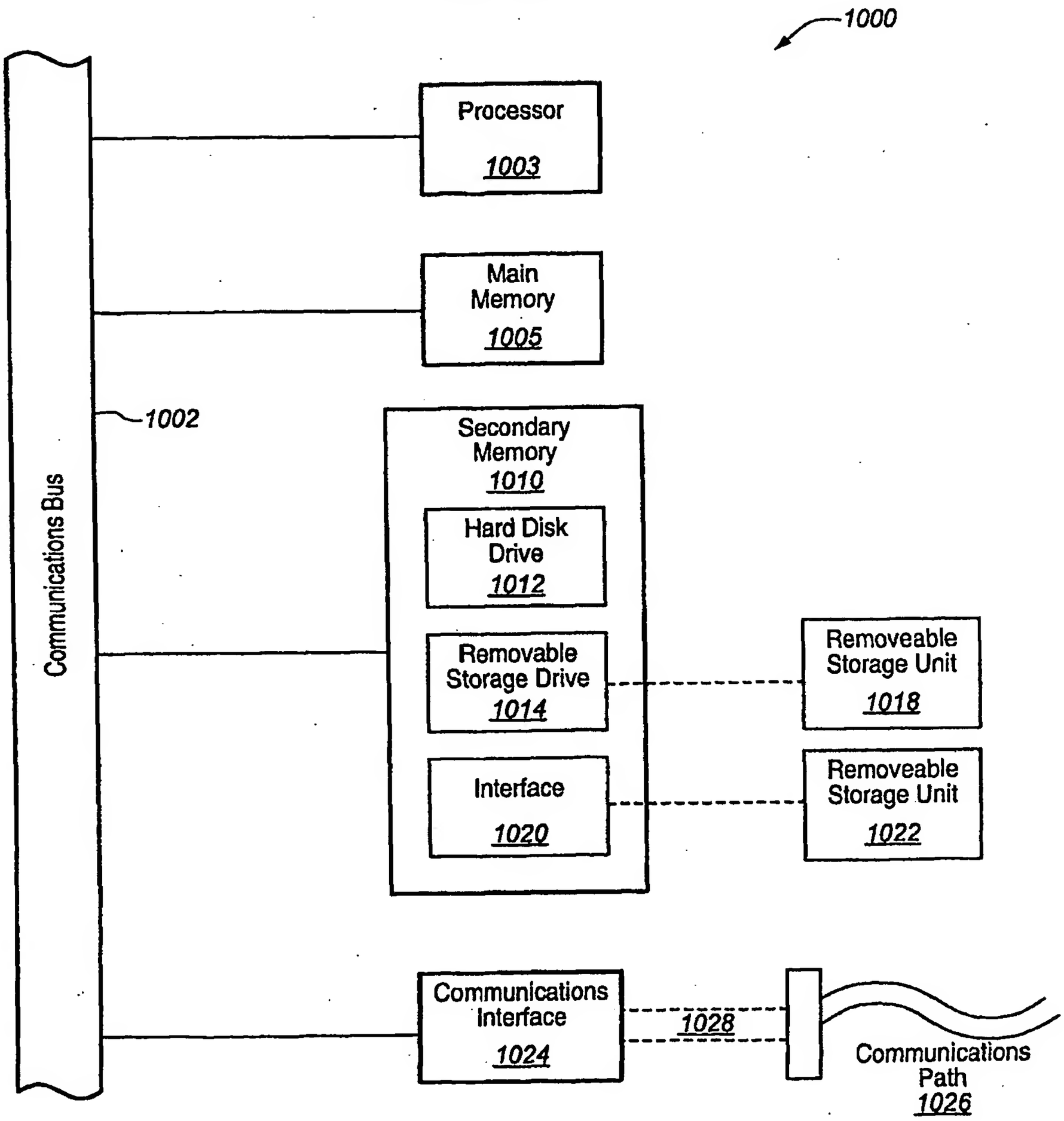

900
914
Your Sentence Score: 81
Phone Score : [au]
: 73
916
Move your mouse above score-bars to see details about each word/phone.
Left click on word score bars to hear your recorded voice of each word.
Right click on word score bars to hear benchmark voice of each word.
Click to hear your recorded voice or benchmark voice of the sentence:
Your Voice
Benchmark
Return
920
918
902
We last met in an hour of shock and suffering.
904
906
HOUR
OF
AN
IN
MET
LAST
WE
au
TRANSCRIPT
Words
Phones
908
910
912
Duration
Stress
Pitch
Pronunciation
Intonation

FIG. 9

FIG. 10


1000
Processor
1003
Main Memory
1005
1002
Secondary Memory
1010
Hard Disk Drive
1012
Removable Storage Drive
1014
Interface
1020
Removeable Storage Unit
1018
Removeable Storage Unit
1022
Communications Bus
Communications Interface
1024
1028
Communications Path
1026